

**Abstract of the Disclosure**

A third generation general partnership program radio communication system or a universal mobile telephone system employs a wide band code division multiple access system. The codes in various incoming signals from different sources are identified by cross correlation using a code matched filter. A multiplexer, samples the signals from each of the P sources at P times the chip rate of the codes in the incoming signals. The mutliplexer time multiplexes the received signals and feeds them to single delay line consisting of N stages each having P elements. Each stage will thus store one sample from each of the P sources. A selected element in each stage has an output which feeds a corresponding input of a code matched filter dot-product adder chain to enable a cross-correlation to be established for each incoming signal in turn.

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